

October 22, 2002

**Re: Front Line Manufacturing, Inc. 085-16182-00070**

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

## **Notice of Decision - Approval**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures

October 22, 2002

Mr. Ray Doss  
Front Line Manufacturing, Inc.  
P.O. Box 176  
Leesburg, Indiana 46538

Re: 085-16182-00070  
First Administrative Amendment to  
Part 70 T085-7186-00070

Dear Mr. Doss:

Front Line Manufacturing, Inc., was issued a permit on July 12, 1999 for a plastic composite manufacturing plant. A letter requesting a change of emission units and pollution control equipment was received on October 2, 2002. Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows:

Due to a recent name change all references to Office of Air Management (OAM) have been changed to the Office of Air Quality (OAQ). Changes made to the permit are identified in **bold** where it was added and ~~strikeout~~ where changes were deleted.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (1) **Two (2)** ~~One (1)~~ Glasscraft Model No. LPA2-100, Gel Spray Guns, **(only one color sprayed at a time)** identified as Emission Unit (EU) ID AA, rated at 148 pounds per hour, and exhausting to one stack identified as S/V ID C, installed in 1995;
- (2) Two (2) Glasscraft Model No. LPA2-100, Chop Spray Guns, identified as EU BB and CC, each rated at 523 pounds per hour, and exhausting to two (2) stacks identified as S/V ID A and B, installed in 1995; and
- (3) Three (3) Circular Saws (one Chicago Pneumatic and two Makitas), identified as EU EE, DD and FF, each rated at 231 pounds per hour, and all exhausting to one (1) stack identified as S/V ID D, installed in 1995.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (1) **Two (2) ~~One (1)~~** Glasscraft Model No. LPA2-100, Gel Spray Guns, **(only one color sprayed at a time)** identified as Emission Unit (EU) ID AA, rated at 148 pounds per hour, and exhausting to one stack identified as S/V ID C, installed in 1995;
- (2) Two (2) Glasscraft Model No. LPA2-100, Chop Spray Guns, identified as EU BB and CC, each rated at 523 pounds per hour, and exhausting to two (2) stacks identified as S/V ID A and B, installed in 1995.

## Emission Limitations and Standards [326 IAC 2-7-5(1)]

### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to the Best Available Control Technology (BACT) analysis presented as part of this application:

- (a) This facility shall use less than 725.5 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per 12 consecutive month period. This usage limit is required to limit the sourcewide potential to emit of VOC to less than 197.1 tons per year to maintain compliance with 326 IAC 8-1-6 (Volatile Organic Compounds).
- (b) the following work practices have been determined to be BACT for the three (3) spray guns:
  - (1) training and instruction of operators in the most effective work practices for controlling placement of the gel coat including correctly positioning gun nozzles to maintain a 90° angle to the mold surface;
  - (2) proper testing of spray guns prior to daily use;
  - (3) proper equipment clean-up and maintenance;
  - (4) all resins and gelcoats will be applied with air assisted airless spray applicators;
  - (5) spray cleaners will be cleaned with acetone;
  - (6) cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly;
  - (7) the spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air;
  - (8) the overspray shall be minimized by spraying as close as practical into the molds;
  - (9) the application equipment operators shall be instructed and trained on the methods and practices utilized to minimize the overspray emitted on the floor and into the air filters;

- (10) all solvent sprayed during cleanup or color changes shall be directed into containers, such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized; and
- (11) storage containers used to store VOC and/or HAPs containing materials shall be kept covered when not in use.
- (c) The allowable VOC emissions from the gel coat spray guns (EU AA) will be 6.4 tons per month, based on 14.7% flash off for non vapor suppressed (NVS) gel coat. The allowable VOC emissions from the resin chop spray guns (EU BB and CC) will be 10.03 tons per month, based on 7.0% flash off for non vapor suppressed (NVS) resin.

The BACT analysis and emissions calculations were based on:

- (1) The gel coating used had a styrene concentration of 33% or less and a flash off of 14.7%.
- (2) The resin coating used had a styrene concentration of 35% or less and a flash off of 7.0%
- (3) The mold release coating had a VOC concentration of 98% or less.
- (4) The catalyst used had a VOC concentration of 49% or less.
- (d) Monthly usage by weight, monomer content, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. VOC emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for a each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
- (e) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA- approved form, emission factors shall be taken from the following reference approved by IDEM, OAQ: "CFA Emission Models for the Reinforced Plastics Industries," Composites Fabricators Association, February 28, 1998. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis.

#### D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the **four (4)** ~~three (3)~~ spray guns (EU AA, BB and CC) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

### Compliance Determination Requirements

#### D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

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The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.1.1 and the PM limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.1.5 Volatile Organic Compounds (VOC)

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Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.6 Particulate Matter (PM)

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The dry filters used for PM control shall be in operation at all times when the **four (4)** ~~three (3)~~ spray guns (EU AA, BB or CC) are in operation and exhausting to the atmosphere.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Gary Freeman, at (800) 451-6027, press 0 and ask for Gary Freeman or extension 3-5334, or dial (317) 233-5334.

Sincerely,

Original Signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments: Replacement Pages  
PD/gkf

cc: File - Kosciusko County  
Kosciusko County Health Department  
Air Compliance Section Inspector - Doyle Houser  
Compliance Data Section - Karen Nowak  
IDEM Northern Regional Office  
Permit Review Section 1 - Gary Freeman  
Air Programs - Chet Bohannon

**PART 70 OPERATING PERMIT  
and ENHANCED NEW SOURCE REVIEW  
OFFICE OF AIR QUALITY**

**Front Line Manufacturing, Inc.  
306 School Street  
Leesburg, Indiana 46538**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T085-7186-00070	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: July 12, 1999  Expiration Date: July 12, 2004
First Administrative Amendment: 085-16182-00070	
Pages Affected: 5, 28, 29, 30	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: October 22, 2002

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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The Permittee owns and operates a plastic composite manufacturing plant.

Responsible Official: Ray Doss  
Source Address: 306 School Street, Leesburg, Indiana, 46538  
Mailing Address: P.O. Box 176, Leesburg, Indiana, 46538  
SIC Code: 3714  
County Location: Kosciusko County  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Minor Source, under PSD;  
Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (1) Two (2) Glasscraft Model No. LPA2-100, Gel Spray Guns, (only one color sprayed at a time) identified as Emission Unit (EU) ID AA, rated at 148 pounds per hour, and exhausting to one stack identified as S/V ID C, installed in 1995;
- (2) Two (2) Glasscraft Model No. LPA2-100, Chop Spray Guns, identified as EU BB and CC, each rated at 523 pounds per hour, and exhausting to two (2) stacks identified as S/V ID A and B, installed in 1995; and
- (3) Three (3) Circular Saws (one Chicago Pneumatic and two Makitas), identified as EU EE, DD and FF, each rated at 231 pounds per hour, and all exhausting to one (1) stack identified as S/V ID D, installed in 1995.

### A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (4) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (1) Two (2) Glasscraft Model No. LPA2-100, Gel Spray Guns, (only one color sprayed at a time) identified as Emission Unit (EU) ID AA, rated at 148 pounds per hour, and exhausting to one stack identified as S/V ID C, installed in 1995;
- (2) Two (2) Glasscraft Model No. LPA2-100, Chop Spray Guns, identified as EU BB and CC, each rated at 523 pounds per hour, and exhausting to two (2) stacks identified as S/V ID A and B, installed in 1995.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to the Best Available Control Technology (BACT) analysis presented as part of this application:

- (a) This facility shall use less than 725.5 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per 12 consecutive month period. This usage limit is required to limit the sourcewide potential to emit of VOC to less than 197.1 tons per year to maintain compliance with 326 IAC 8-1-6 (Volatile Organic Compounds).
- (b) the following work practices have been determined to be BACT for the three (3) spray guns:
  - (1) training and instruction of operators in the most effective work practices for controlling placement of the gel coat including correctly positioning gun nozzles to maintain a 90° angle to the mold surface;
  - (2) proper testing of spray guns prior to daily use;
  - (3) proper equipment clean-up and maintenance;
  - (4) all resins and gelcoats will be applied with air assisted airless spray applicators;
  - (5) spray cleaners will be cleaned with acetone;
  - (6) cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly;
  - (7) the spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air;
  - (8) the overspray shall be minimized by spraying as close as practical into the molds;
  - (9) the application equipment operators shall be instructed and trained on the methods and practices utilized to minimize the overspray emitted on the floor and into the air filters;



- (10) all solvent sprayed during cleanup or color changes shall be directed into containers, such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized; and
  - (11) storage containers used to store VOC and/or HAPs containing materials shall be kept covered when not in use.
- (c) The allowable VOC emissions from the gel coat spray guns (EU AA) will be 6.4 tons per month, based on 14.7% flash off for non vapor suppressed (NVS) gel coat. The allowable VOC emissions from the resin chop spray guns (EU BB and CC) will be 10.03 tons per month, based on 7.0% flash off for non vapor suppressed (NVS) resin.

The BACT analysis and emissions calculations were based on:

- (1) The gel coating used had a styrene concentration of 33% or less and a flash off of 14.7%.
  - (2) The resin coating used had a styrene concentration of 35% or less and a flash off of 7.0%
  - (3) The mold release coating had a VOC concentration of 98% or less.
  - (4) The catalyst used had a VOC concentration of 49% or less.
- (d) Monthly usage by weight, monomer content, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. VOC emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for a each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAM.
- (e) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA- approved form, emission factors shall be taken from the following reference approved by IDEM, OAM: "CFA Emission Models for the Reinforced Plastics Industries," Composites Fabricators Association, February 28, 1998. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis.

#### D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the four (4) spray guns (EU AA, BB and CC) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

## **Compliance Determination Requirements**

### **D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)]**

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.1.1 and the PM limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### **D.1.5 Volatile Organic Compounds (VOC)**

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

## **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

### **D.1.6 Particulate Matter (PM)**

The dry filters used for PM control shall be in operation at all times when the four (4) spray guns (EU AA, BB or CC) are in operation and exhausting to the atmosphere.

### **D.1.7 Monitoring**

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack S/V ID C while one or more of the booths are in operation and exhausting to the atmosphere. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed.

The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

## **Record Keeping Requirements [326 IAC 2-7-5(3)]**

### **D.1.8 Record Keeping Requirements**

(a) To document compliance with Conditions D.1.1 and/or D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and/or D.1.2.